

CLAIMS

1. An image-forming system comprising an object, a multi-element magnifying optical path and focal length varying means for addition, 5 adjustment or removal of one or more elements in the optical path in order to vary the distance between a viewer's eye and the system, at which distance the magnified object can be viewed.
2. A system according to claim 1, wherein the focal length varying 10 means comprises means for moving one or more optical elements, into and out of the optical path.
3. A system according to claim 2, wherein the focal length varying means comprises means for moving a flat aspherical fresnel lens into and out 15 of the optical path.
4. A system according to claim 1, wherein the focal length varying means comprises an electro-optical element.
- 20 5. A system according to claim 4, wherein the electro-optical element comprises a liquid crystal lens.
6. A system according to claim 4, wherein the electro-optical element comprises a programmable diffractive element.
- 25 7. A system according to any preceding claim, wherein the object is light-emissive.
8. A system according to claim 7, wherein the object is arranged to emit 30 polarized light.

9. A system according to any one of claims 1 to 6, wherein the object is light-reflective.
- 5 10. A system according to any preceding claim, wherein a polarizer is located between the object and the optical path.
11. A system according to any preceding claim, wherein the optical path comprises, in order, a curved beamsplitter, a first quarter wave plate, a 10 planar beamsplitter, a second quarter-wave plate and a linear polarizer.
12. A system according to any one of claims 1 to 10, wherein the optical path comprises, in order, a holographic analogue of a curved beamsplitter, a first quarter wave plate, a planar beamsplitter, a second quarter-wave plate 15 and a linear polarizer.
13. A system according to any preceding claim, wherein light emitted from the object is collimated.